D3407-041 B110684 Work Order ID 110684 \*110684\* Page 1 January-07-14 3:00:35 PM Setup Start Accept D3407-041 \*N900040100\* Item ID: **Revision ID:** Stop **Item Name:** Tow Ring \*8\* Start Qty: 8.00 **Cust Item ID:** 1/07/14 **Start Date:** Req'd Qty: 8.00 Required Date: 1/07/14 **Customer:** Reference: Run Start Date: 14-01-09 Tooling: Process Plan: Date: **Approvals:** Stop SPC (Y/N): OC: Date:\_ Date: Reject Reject Tool # Plan Accept Insp. Set Up/ Tool ID Sequence ID/ Operation Code Qty Qty Number Stamp Work Center ID Run Hours **Description Revision Nbr Draw Nbr** D3407 Rev E 0.00 100 14-01-22 MAL Large Fab \*100\* 0.00 Large Fab Memo Weld D3407-1/-5 using welding rod TIG174 as per Dwg D3407 & QSI 004 A/R TIG174 ROD Batch: W102576 Large Fab QC9- Inspect visual per QSI004- Fusion Welds 0.00 110 8 111-01-23 \*110\* DAS 0.00 QC 9 Memo 9-89 Quality Control 0.00 QC5- Inspect part completeness to step on W/O 120 (4.0D3 DAS \*120\* 0.00 QC Memo

**Quality Control** 

9-89

DQA:	Date:		WORK ORDER NON-CONFORMANCE / UPDATE									
QA Closed:	Date:					WARELY OF DATE (		ork Order up	date only	AEROSPACE		
Work Order:			DISPOSITION			AGAINST Skid-tube Crosstube						
Part No			Rework Scrap Use-as-is Suspected Unapproved	Scrap Machining S Use-as-is Thermoforming				4	Water Jet d. Eng. Coor. e/Packaging Supplier	Engineering Quality Other		
Root Date	Step Qt	1	ription of work order update or non-conformance		nitial ief Eng	Action Description		Sign & Date	Verification	QC Inspector		
Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Transport Unapproved												
				FAl	ULT CA	regory				-		
Landing Gear  Bending  Centre Note  Cracks  Crimp/Kinl  Cuffs  Crushing  Heat Treat  Inspection  Marks/Cha  Turning Se  Wave/Twi	General Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish Fit/Function		Folio/Program Grain Hardware Inspection Incomplete/Unqualified Instructions Incomplete/Unclear Misaligned/off center Mislabeled Misread Off-set Out of Calibration			Outside Dim Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	tolerance ci ssing	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other				

Work Orde		0684		*110			Alas Alamana da	Page 2			
Item ID: Revision ID: Item Name:	D3407-041 Tow Ring			Accept	*N900	<b>040</b>	100	)* s	etup Start	1 7	S1* S2*
Start Date: Required Date: Reference:	1/07/14 1/07/14	Start Qty: 8.00 Req'd Qty: 8.00	*8* *8*		Cust Item I	D:		n	Stor		
Approvals:	Process Plan:		Date:	_ Tooling: _ SPC (Y/N):		Date:			tun Star Stop	, "IXI	R1* R2*
Sequence ID/ Work Center II  130  *120* Powdercoat Powder Coating	D	CTADT TIA	readed Section**  AE: 400.  APERATURE: 400	DAS	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp  DAS  34  9-89
140 *140* oc		QC3- Inspect Part Finish	1	0.00 9-89 0.00 14/1/2	4			8			

150

Identify as per dwg & Stock Location: 57463 0.00

\*150\* Packaging

Quality Control

0.00

 $\frac{8 \times \frac{\text{DAS}}{28}}{9.89} \frac{14-01-24}{14-01}$ 

Packaging

Memo

DISPOSITION   Rework   Scrap   Use-as-is   Skid-tube   Grosstube   Rec/Store/Packaging   Other   Supplier	DQA:			Date:										_	
Work Order:    Part No.   Superied Unapproved   DisPosition   Skid-tube   Crosstube   Machining   Finishing   Rec/Store/Packaging   Other   Document   Chief Eng   Description   Description   Description   Description   Description   Other   D							WORK ORDER NON-	-CC	ONFO	RMANCE / UPDATE					AEROSPACE
Rework   Scrap   Use-as-is   Suspected Unapproved   Suspected Unapproved   Suspected Unapproved   Suspected Unapproved   Suspected Unapproved   Cause   Date   Step   Qty   Description of work order update   Or non-conformance   Or non-con	QA Closed:			Date:							W	ork Order up	date only	$\perp$	
Part No. Skid-tube	Work Orde	er:					DISPOSITION			AGAINST	ST DEPARTMENT/PROCESS				
Part No.	Work Orac	•					Rework			Skid-tube Crosstube	Γ	Water Jet			Engineering
NCR No.    Use-as-is   Thermoforming   Finishing   Composite   Supplier   Other   Composite   Supplier   Other   Composite   C	Part N	lo.								<b>⊢</b>	-	Proc	<u> </u>	┪	· ·
Root Cause Date Step Qty Description of work order update or non-conformance Chief Eng Description Date Verification OC Inspector  Design Doc/Data   Equip/Tooling   Equip/Too		•				_	· —					4		1	· —
Date   Step   Qty   Or non-conformance   Chief Eng   Description   Date   Verification   QC Inspector	NCR N	Ю.			· ·		Suspected Unapproved			Large Fab Composite		]	Supplier		
Design Doc/Data	Root					Desci	ription of work order update	ı	nitial	Action		Sign &		Т	
Dacy/Data   Equip/Tooling   Handling/Pre   Material   Doperator   Offset/Setup   Process   Supplier   Training   Training   Training   Centre Not Concentric   BOM/Route   Broken/Damage/Defect   Hardware   Cracks   Broken/Damage/Defect   Hardware   Cutfo Short   Constming   Contenting   Co	Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	┙	QC Inspector
Handling/Pre   Material   Operator   Offset/Setup   Process   Supplier   Training   Transport   Unapproved   Offset/Setup   Process   Operator   Offset/Setup   Operator   Ope	Design													-	
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Operator Offset/Setup Process Supplier Training Transport Unapproved    Bending	Handling/Pre														
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Bending								FAI	ULI CA	TEGORY					
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Marks/Chatter Drill Holes Off-set		<del> </del>	<del></del>			$\vdash$	1	_	4		L	J. 0 WC1 1033/.			
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Work Ord January-07-14		.0684		*110684*								Pa	ige 3
Item ID: Revision ID: Item Name:	D3407-041 Tow Ring			Accept	*N900	<b>040</b>	100	* Set	_	Start Stop		S1 S2	
Start Date: Required Date Reference:	1/07/14 e: 1/07/14	Start Qty: 8.00 Req'd Qty: 8.00	*8* *8*		Cust Item I. Customer:	D:							
Approvals:	Process Pla	an:	Date:	Tooling: _ SPC (Y/N):		nte:	Ru		Start Stop		R1 R2	_	
Sequence ID/ Work Center		Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code		Reject Qty		<b>~ I \</b> Reject Number	Insp. Stam	
160 *160* QC		QC21- Final Inspection	- Work Order Release	0.00				ML	5	14 +	01-	23	
Quality Control								A	14	-O1	-QL		

DQA:			Date:												
						<b>WORK ORDER NON-</b>	I-CONFORMANCE / UPDATE								
QA Closed:			Date:							W	ork Order up	date only			
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		Cracks				Broken/Damage/Defect		Hardwa	are		Part Incorred	ci [	Temperature/Cure		
		Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspect	ion Incomplete/Unqualified		Part Lost/Mi	ssing	Weld		
		Cuffs				Contamination		Instruc	tions Incomplete/Unclear		Part Moved		Wrong Stock Pulled		
		Crushing				Countersink	L	Misali	gned/off center	L	Positioned V	Vrong	<b></b>		
	L	Heat Treat				Cut Too Short		Mislabe	eled	L	Power Loss/	Surge	Other.		
	Inspection Strip in Tube			Tube		Drawing		Misread							
	Marks/Chatter					Drill Holes	Off-set								
		Turning Sequence				Finish	_	-1	Calibration						
		Wave/Twist in Tube			L_	Fit/Function		Out of	Sequence						

January-07-14 3:00:35 PM

Work Order ID:

110684

Parent Item:

D3407-041

**Parent Item Name:** 

Tow Ring

**Start Date:** 1/07/14

Required Date: 1/07/14

Start Qty: 8.00

Required Qty: 8.00

**Comments:** 

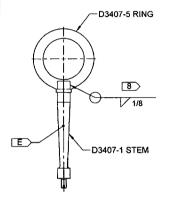
IPP Rev:A05.10.14New issueKJ/EC

IPP Rev:B 08-09-09 revE as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status	
D3407-1		Manufactured	No			100	Each	38.0000	1	8				_
Stem											<del></del>	<del></del>		
		-		<b>Location</b>		Loc Oty	Lo	c Code						
				WA001		38								
				1038 1092	, A*	6 32			·	$\times \mathcal{B}$	1	14-01	-22	MAL
D3407-5		Manufactured	No			100	Each	29.0000	1	8				
Ring														
				<b>Location</b>		Loc Oty	Lo	c Code	,					
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				1070	660	5								
				108	467 × 8	24				$\times 8$		14-0	1-22	mAI

DQA:			Date:											<u>~</u>
						WORK ORDER NON-	-CC	ONFO	RMANCE / UPDATE			_	AEROSPAC	U E
QA Closed:			Date:							W	ork Order up	date only		
Work Ordei	r:					DISPOSITION			AGAINST	/PROCESS				
	· · -					Rework	1		Skid-tube Crosstube		]	Water Jet	Engineering	
Part No	ο.				į	Scrap			Machining Small Fab	_	Pro	d. Eng. Coor.	Quality	
	-					Use-as-is			noforming Finishing		Rec/Stor	re/Packaging	Other	
NCR N	o. <b>-</b>				· ·	Suspected Unapproved	]		Large Fab Composite		]	Supplier		J
Root	Т				Desc	iption of work order update		nitial	Action		Sign &			
Cause	-	Date	Step	Qty	D C 3 C .	or non-conformance	1	ief Eng			Date	Verification	QC Inspector	
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Landin	$\overline{}$		•			General	_	1 ,.	_	_	1		¬	
-	_	Bending			<u> </u>	Bend	L	1	Program	L	Outside Dim		Pressure/Forced	
-	-	Centre No	ot Concen	ntric	<u> </u>	BOM/Route	$\vdash$	Grain		<u> </u>	Over/Under	<b>-</b>	Set-up	
-		Cracks	1./5:1-		<u> </u>	Broken/Damage/Defect	<u> </u>	Hardwa I.			Part Incorred	<b>j-</b>	Temperature/Cure	
ļ <u></u>		Crimp/Kink/Ripple/Wave			$\vdash$	Burrs	$\vdash$	1	ion Incomplete/Unqualified		Part Lost/Mi	issing	Weld	_
		Crushing			-	Countarink		4	tions Incomplete/Unclear	$\vdash$	Part Moved	L	Wrong Stock Pulled	1
	Crushing Heat Treat				-	Countersink Cut Too Short		Mislab	gned/off center	-	Positioned V Power Loss/		Other	
<b> </b>	Inspection Strip in Tube			Tuhe		Drawing	$\vdash$	Misrea		<u> </u>	I owel ross/	Juige [	Totaler	
<u> </u>	Marks/Chatter			Drill Holes		Off-set								
	Turning Sequence				Finish	Out of Calibration								
<u> </u>	Turning Sequence Wave/Twist in Tube					Fit/Function		ł	Sequence					

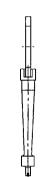
QTY QTY -041 QTY -043 PART NUMBER DESCRIPTION TOW RING D3407-041 X D3407-043 TOW RING D3407-045 D3407-1 STEM STEM D3407-3 D3407-5 RING D3407-7 STEM

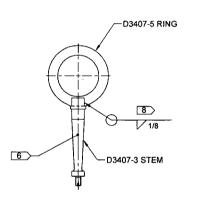


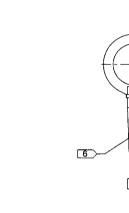
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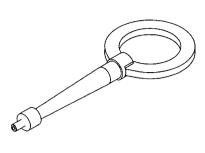
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08.07.23

08.04.07

**D3407-041 TOW RING** 

**D3407-043 TOW RING** 

D3407-045 TOW RING

-D3407-7 STEM

-D3407-5 RING

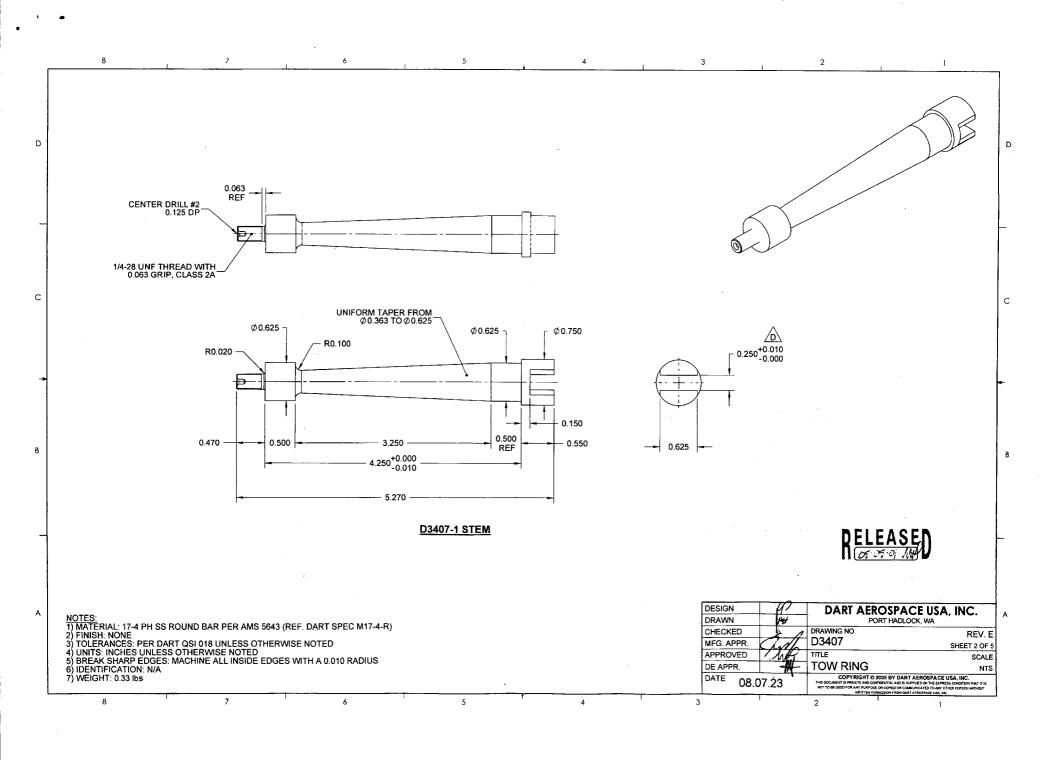
:	ADD D3407-045 (ZN B2-1, D8-1); ADD D3407-7 (ZN B6-5); REVISED NOTE 6 TO ADD IDENTIFICATION (ZN A5-1); REASON: PRODUCTION FACILITY
)	D3407-1/-3 SLOT WAS ROUND NOW FLAT FOR ASSEMBLY WITH D3407-5 (ZN C2-2, C2-3); D3407-5 WAS ROUND NOW FLAT ON ONE END FOR ASSEMBLY WITH D3407-1/-3 (ZN B6-4); REASON: PRODUCTION FACILITY

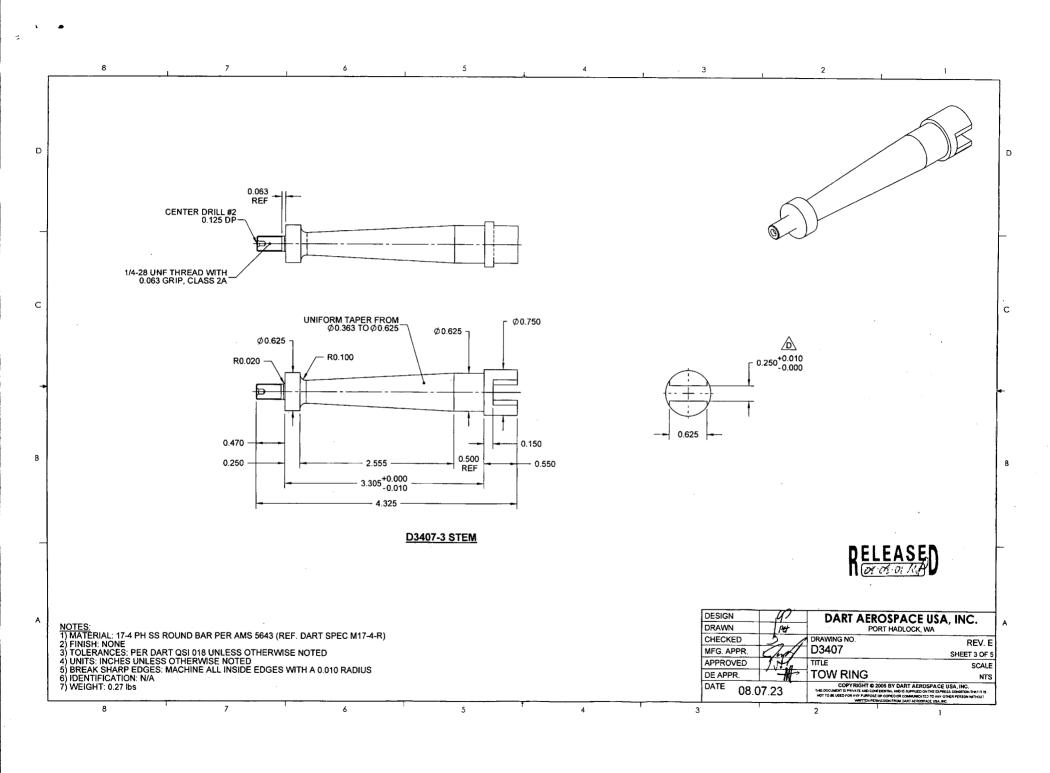
NOTES:
1) MATERIAL: N/A
2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3 (EXCEPT THREADS)
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: N/A

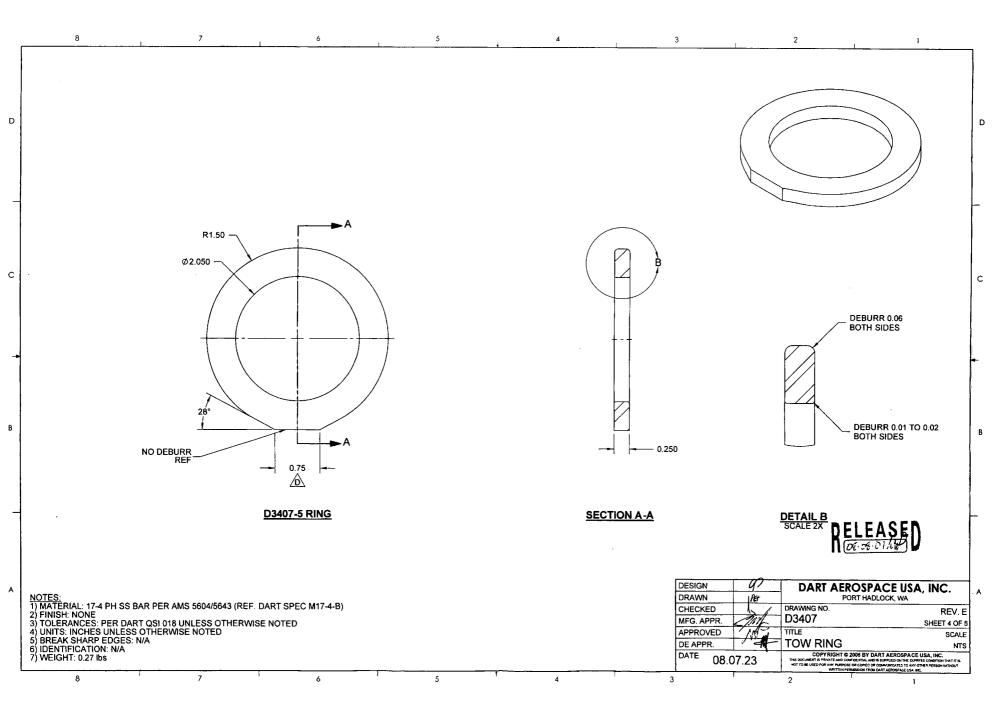
5) BREAK SHARP EDGES: NIA
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3407-XXX" USING BLACK FINE POINT PERMANENT INK MARKER
7) WEIGHT: D3407-041 - 0.60 lbs, D3407-043 - 0.53 lbs, D3407-045 - 0.61 lbs
8) WELD PER DART QSI 004 ON ALL EDGES BETWEEN STEM AND RING

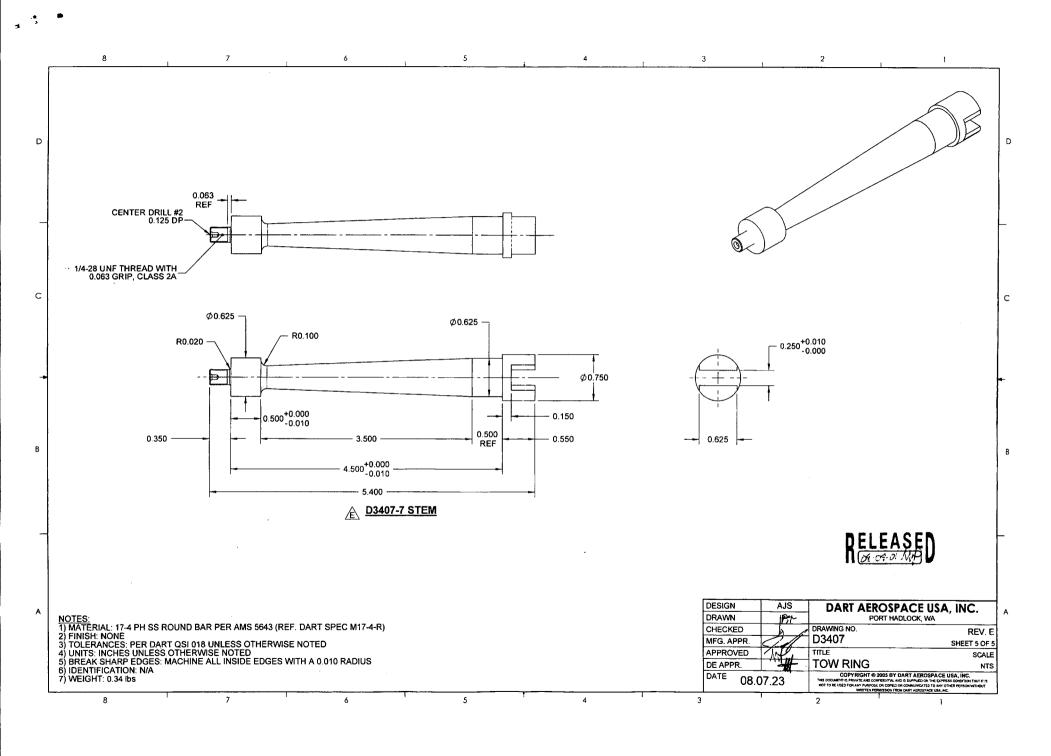
110684 MP 14-01-09

С	-1/-3 LOI	IGER FOR FIT	W/WASHER	CP	05.09.09			
В	UPDATE	DIAMETER, T	HREAD CLASS ADDED	CP	05.06.17			
Α	NEW ISS	CP	05.03.16					
REV.			DESCRIPTION	BY	DATE			
DESIG	N	14)	DART AEROSPACI	E USA	. INC.			
DRAW	N	Ped	PORT HADLOCK		,			
CHECK	(ED	15-1	DRAWING NO.		REV. E			
MFG. A	APPR.		D3407		SHEET 1 OF 5			
APPRO	OVED	101	' TITLE		SCALE			
DE API	PR.	-#	TOW RING		NTS			
DATE	08.0	7.23	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC.  THIS DOCUMENT S PROWITE AND CONFIDENTIAL MICH S SUPPLED ON THE ELIMESS CONDITION THAT IT IS NOT TO BE USED FOR MY PARPOSE OR CONFIDENCE THE TO WITH PRISON WITHOUT					









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